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Reg. No. : .....

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(For the candidates admitted from 1999-2001)

M.Sc. DEGREE EXAMINATION, APRIL 2004.

First Semester

Physics

CLASSICAL MECHANICS, STATISTICAL  
MECHANICS AND RELATIVITY

Time : Three hours

Maximum : 100 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

Choose the correct answer :

1. The frequency of the harmonic oscillator is

- (a)  $U = \frac{1}{2\pi} \sqrt{\frac{k}{m}}$
- (b)  $U = \frac{1}{2\pi} \sqrt{\frac{m}{k}}$
- (c)  $U = 2\pi \sqrt{\frac{k}{m}}$
- (d)  $U = 2\pi \sqrt{\frac{m}{k}}$